(19) JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 05209200 A

(43) Date of publication of application: 20.08.93

(51) Int. Cl C11D 17/06
C11D 11/00

(21) Application number: 04107459

(22) Date of filing: 27.04.92

(30) Priority: 17.05.91 JP 03112926
17.05.91 JP 03112927
17.05.91 JP 03112928
02.08.91 JP 03194265
02.08.91 JP 03194266
02.08.91 JP 03194267
04.12.91 JP 03320517

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(54) PRODUCTION OF NONIONIC DETERGENT GRAIN

(57) Abstract:

PURPOSE: To obtain the subject detergent grains excellent in flow characteristics and noncaking properties by mixing detergent raw materials containing a nonionic surfactant as a main base, stirring and mixing the resultant mixture in a specific stirring type mixer, granulating the mixture, then mixing the prepared granulated material with fine powder and coating the granulated material with the fine powder.

CONSTITUTION: The objective grains are obtained by mixing detergent raw materials composed of, e.g. 75-95 pts.wt. builder and 5-25 pts.wt. nonionic surfactant, stirring and mixing the resultant mixture in a stirring type mixer (having a stirring shaft equipped with stirring blades in the internal center and capable of forming a clearance between the stirring blades and a device wall in rotating the stirring blades), forming a sticking layer of the detergent raw materials on the wall of the mixer, granulating the mixture while enhancing the bulk density, mixing 100 pts.wt. prepared granulated material with 0.5-30 pts.wt. fine powder (preferably an aluminosilicate having 210μm average particle diameter) and coating the surface of the granulated material with the fine powder. The bulk density of the grains is 0.6-1.2g/ml.